

ABSTRACT

A circuit for generating a component of n-th order includes: six differential amplifiers (15A to 15F) having a pair of input terminals supplied with a common linear input signal and a constant level signal of a predetermined level, outputting a reversed or non-reversed signal to the linear input signal, and having a limiter function to limit the output signal to a predetermined maximum value and a minimum value; a constant level signal generation circuit for supplying the constant level signal to each of the six differential amplifiers; a current mirror circuit (14) for controlling current flowing in the differential amplifiers (15A to 15F); and addition resistors (16A, 16B) for adding the output current of the differential amplifiers (15A to 15F). By increasing the flowing current by the sixth differential amplifier (15F) so as to increase the resistance value, it is possible to obtain a highly accurate output current of a component of a 5-th order function having more precipitous inclination with respect to the input signal.

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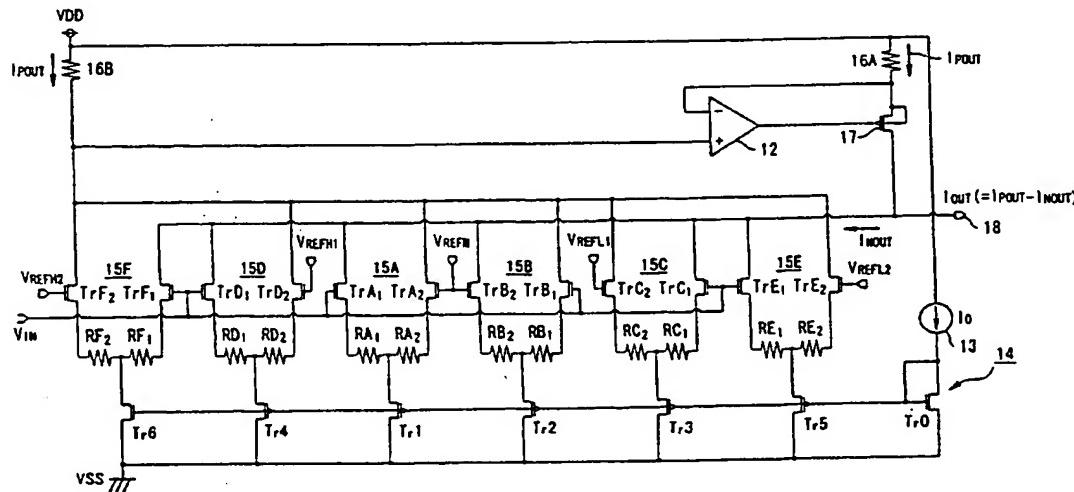
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(54) Title: DEVICE FOR GENERATING FUNCTION OF APPROXIMATE n-TH DEGREE AND TEMPERATURE COMPENSATION QUARTZ OSCILLATION CIRCUIT

(54) 発明の名称: 近似 n 次関数発生装置及び温度補償水晶発振回路



(57) Abstract: A circuit for generating a component of n-th degree includes: six differential amplifiers (15A to 15F) having a pair of input terminals supplied with a common linear input signal and a constant level signal of a predetermined level, outputting a reversed or non-reversed signal to the linear input signal, and having a limiter function to limit the output signal to a predetermined maximum value and a minimum value; a constant level signal generation circuit for supplying the constant level signal to each of the six differential amplifiers; a current mirror circuit (14) for controlling current flowing in the differential amplifiers (15A to 15F); and addition resistors (16A, 16B) for adding the output current of the differential amplifiers (15A to 15F). By increasing the flowing current by the sixth differential amplifier (15F) so as to increase the resistance value, it is possible to obtain a highly accurate output current of a component of a 5-th degree function having more precipitous inclination with respect to the input signal.

(57) 要約: 対の入力端子に共通の1次の入力信号及び所定レベルの定レベル信号が個別に入力され、前記1次の入力信号に対して反転又は非反転信号を出力すると共に、出力信号を所定の最大値及び最小値で制限するリミッタ機能を有する複数6個の差動増幅器 15A～

〔統葉有〕